**STIC Database Tracking Number: 3112402**

| To: Examiner Stefanos Karmis | From: Matthew Hogan |
|---|---|
| Location: KNX4A35 | Location: EIC3600 |
| Art Unit: 3693 | KNX 2D08-B |
| Date: 11/05/2009 | Phone: (571) 272-6674 |
| Case Serial Number: 09/767842 | Matthew.Hogan@uspto.gov |

## Search Notes

Dear Examiner KARMIS:

Please find attached the results of your search for the above-referenced related case. The search was conducted in Dialog, in EBSCOhost (mandatory I & PC Abstract databases) and in ProQuest (Financial Times database), as well as online. All mandatory databases for allowance were searched.

I have listed *potential* references of interest in the opening section of these search results. *However, please be sure to review the entire report.* There may be additional references that you find useful.

Please note that the results, after the potential references of interest, proceed through an Inventor search (which is provided without regard to priority date and in GREEN TEXT) and then to results in both Abstract and Full Text databases (which are more directly screened for priority date).

If you have any questions about the search, or need a refocus, please do not hesitate to contact me.

Thank you for using the EIC, and we look forward to your next search!

## I. Potential References of Interest

**Dialog eLink:** Order File History
8/3K/5 (Item 5 from file: 348)
DIALOG(R)File 348: EUROPEAN PATENTS
(c) 2009 European Patent Office. All rights reserved.

00212974

**System for accounting for postage expended by a postage meter having data security during printing.**
System zur Verbuchung der Postgebuhren, die durch eine mit Datensicherstellung wahrend des Druckvorganges versehenen Frankiermaschine verbraucht werden.
Systeme pour comptabiliser la taxe postale depensee par une machine a affranchir munie de moyens de protection des donnees pendant l'impression.

**Patent Assignee:**

- **PITNEY BOWES INC.**; (244950)
  One Elmcroft; Stamford Connecticut 06926-0790; (US)
  (applicant designated states: CH;DE;FR;GB;LI)

**Inventor:**

- **Mallozzi, Joseph D.**
  112 Teeter Rock Street; Trumbull, Conn. 06611; (US)

- **Hutcheson, Neale C.**
  205 Park Street; New Canaan, Conn. 06840; (US)

- **Breault, Michelle S.**
  199 Osborne Hill Road; Fairfield, Conn. 06430; (US)

- **Daniels, Edward P.**
  350 Stonehouse Road; Trumbull, Conn. 06611; (US)

**Legal Representative:**

- **Hansen, Bernd, Dr.rer.nat. et al (4922)**
  Hoffmann, Eitle & Partner Patentanwalte Arabellastrasse 4 Postfach 81 04 20; W-8000 Munchen 81; (DE)

|        | Country | Number | Kind | Date     |         |
|--------|---------|--------|------|----------|---------|
| Patent | EP      | 230658 | A2   | 19870805 | (Basic) |
|        | EP      | 230658 | A3   | 19871216 |         |
|        | EP      | 230658 | B1   | 19910828 |         |

| | | | | | | |
|---|---|---|---|---|---|---|
| Application | EP | 86118032 | | 19861224 | |
| Priorities | US | 813458 | | 19851226 | |

**Designated States:**
CH; DE; FR; GB; LI;

**International Patent Class (V7):** G07B-017/02; ; **Abstract Word Count:** 270

| Legal Status Type | Pub. Date | Kind | Text |
|---|---|---|---|

**Language** Publication: English
Procedural:          English
Application:          English

| Fulltext Availability Available Text | Language | Update | Word Count |
|---|---|---|---|
| CLAIMS B | (English) | EPBBF1 | 1288 |
| CLAIMS B | (German) | EPBBF1 | 1216 |
| CLAIMS B | (French) | EPBBF1 | 1449 |
| SPEC B | (English) | EPBBF1 | 5846 |
| Total Word Count (Document A) 0 | | | |
| Total Word Count (Document B) 9799 | | | |
| Total Word Count (All Documents) 9799 | | | |

**Specification:** ...16-4 and used to specify numeric values such as account number, postage value, class, account, etc.

"." -used as a delimiter between dollars and cents.

"-" -**Hyphen**/minus, used as a **hyphen** within an **account number** and as a **minus sign** when editing account data.

RESET - Reset, used to exit the current function and return to the initial state.

CE/C- Clear Entry, used to clear...

12/3,K/4 (Item 2 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rights reserved.

01379643    **Supplier Number:** 09549631 **(Use Format 7 Or 9 For** FULL TEXT **)**
**"I threw away my checkbook." (CheckFree's electronic bill-paying service) (includes related articles on the Accuret reconciliation service and guidelines for electronic bill-paying)**

Shipley, Chris
PC-Computing , v3 , n11 , p112(7)
Nov , 1990

**Language:** ENGLISH     **Record Type:** FULLTEXT; ABSTRACT
**Word Count:** 3608   **Line Count:** 00275
```
...name. When the merchant couldn't figure out which account to credit, it
returned the check to me.
       While CheckFree should be able to handle account
numbers up to 22 characters long, in this case it was
apparently thrown off by the spacing between sets of digits. Removing the
spaces solved the problem. Even though merchants print spaces or
dashes between digits in account numbers, you don't
need to include them in the account numbers you enter. For
example, 999-000-0099 becomes 9990000099.
       Aside from those glitches, CheckFree has worked wonderfully.
Merchants get their money on the day I...
```

14/3K/21 (Item 21 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

00769406

**INTEGRATED BUSINESS-TO-BUSINESS WEB COMMERCE AND BUSINESS AUTOMATION SYSTEM**
SYSTEME INTEGRE D'AUTOMATISATION DES ECHANGES COMMERCIAUX ENTRE ENTREPRISES PAR L'INTERNET

**Patent Applicant/Inventor:**

- **WONG Charles**
  14250 Miranda Road, Los Altos Hills, CA 94022; US; US(Residence); US(Nationality)

**Legal Representative:**

- **COVERSTONE Thomas E(agent)**
  Burns, Doane, Swecker & Mathis, LLP, P.O. Box 1404, Alexandria, VA 22313-1404; US;

|  | Country | Number | Kind | Date |
|---|---|---|---|---|
| Patent | WO | 200102927 | A2-A3 | 20010111 |
| Application | WO | 2000US16739 |  | 20000616 |
| Priorities | US | 99334688 |  | 19990617 |

**Designated States:** (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK,
DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,

MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW

**[EP]** AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE;

**[OA]** BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
MR; NE; SN; TD; TG;

**[AP]** GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

**[EA]** AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;
**Language** Publication Language: English
Filing Language:                    English
Fulltext word count:               51133

**Claims:**

...various graphing options are provided. In the illustrated example, the data is presented in the form of
line graphs. Trend reports, aside from comparing one **account** to another over the **identical** period, may
also **compare** the same account over different periods. Hence, in the case of both financial reports and
trend analyses, an important feature is that the date range...assignment. Resulting data is supplied to at
least three destinations: a Measuring Algorithm, a Historical Data Comparison Algorithm, and an output
display structure, indicated
by **dashed** lines. The Measuring Algorithm compares actual performance todesired performance
established by goals. Preferably, goals are set by employees in consultation with management. In
an...system is typically interactive, via the web, but may also be through the exchange of data
files,113such as ASCII files, as indicated in **dashed** lines in various places within Figure 165.
Depending on the nature of the underlying business, the database may store an electronic catalog,
created and maintained...

8/3K/3 (Item 3 from file: 348)
DIALOG(R)File 348: EUROPEAN PATENTS
00655907

**System and method for processing telephone numbers.**
System und Verfahren zum Verarbeiten von Telephonnummern.
Systeme et methode pour le traitement des numeros de telephone.

**Patent Assignee:**

- **MICROSOFT CORPORATION**; (749861)
  One Microsoft Way; Redmond, Washington 98052-6399; (US)
  (applicant designated states: DE;FR;GB)

**Inventor:**

- **Nixon, Toby L.**
  13920 120th Avenue Northeast; Kirkland, Washington 98034; (US)

- **Menezes, Arul A.**
  13930 Northeast 13th Street No.6-2; Bellevue, Washington 98005; (US)

**Legal Representative:**

- **Patentanwalte Grunecker, Kinkeldey, Stockmair & Partner (100721)**
  Maximilianstrasse 58; D-80538 Munchen; (DE)

|  | Country | Number | Kind | Date |  |
|---|---|---|---|---|---|
| Patent | EP | 631418 | A1 | 19941228 | (Basic) |
| Application | EP | 94109756 |  | 19940623 |  |
| Priorities | US | 170999 |  | 19930624 |  |
|  | US | 148057 |  | 19931105 |  |

**Designated States:**
DE; FR; GB;

**International Patent Class (V7):** H04M-003/00; ; **Abstract Word Count:** 167

| Legal Status Type | Pub. Date | Kind | Text |
|---|---|---|---|

**Language** Publication: English
Procedural:            English
Application:            English

| Fulltext Availability Available Text | Language | Update | Word Count |
|---|---|---|---|
| CLAIMS A | (English) | EPABF2 | 4520 |
| SPEC A | (English) | EPABF2 | 10095 |
| Total Word Count (Document A) 14615 | | | |
| Total Word Count (Document B) 0 | | | |
| Total Word Count (All Documents) 14615 | | | |

**Specification:** ...The expansion analyzer 54 uses this information to determine that the first digit segment, contained within the parentheses, is an area code, and that the **hyphen** divides the **subscriber number** into the exchange prefix and the individual telephone number. Any digits that precede the digit segment contained with the parentheses (i.e., the area code...

6/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX
(c) 2009 Thomson Reuters. All rights reserved.
0009767995 *Drawing available*
WPI Acc no: 2000-055248/200005
Related WPI Acc No: 2000-025566
XRPX Acc No: N2000-043196
**Calling party number display system for telephones receiving international calls**
Patent Assignee: SIEMENS INFORMATION & COMMUNICATIONS NET (SIEI)
Inventor: KUCMEROWSKI D L; MULLER H; VANDER MEIDEN D A

Patent Family ( 1 patents, 25 countries )

| Patent Number | Kind | Date | Application Number | Kind | Date | Update | Type |
|---|---|---|---|---|---|---|---|
| EP 961463 | A2 | 19991201 | EP 1999109024 | A | 19990507 | 200005 | B |

Priority Applications (no., kind, date): US 199885365 A 19980526

Patent Details

| Patent Number | Kind | Lan | Pgs | Draw | Filing Notes |
|---|---|---|---|---|---|
| EP 961463 | A2 | EN | 11 | 6 | |
| Regional Designated States,Original | AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI | | | | |

Original Publication Data by AuthorityArgentina**Publication No.** ...**Original Abstracts:**party telephone network (20).The parsing of the calling party numbers (410) into fields introduces field separator characters between the fields including delimiters such as **dashes**, spaces, parenthetical, graphical **characters** and the like to separate destination codes from **subscriber numbers** according to **international**, **country**, national or regional fields, such as the North American Numbering Plan.

8/5,K/16 (Item 9 from file: 2)
DIALOG(R)File 2: INSPEC
(c) 2009 The IET. All rights reserved.

06296769
**Title:   Automatic region labeling of the layered map**
**Author(s):**   Min-Ki Kim; Mun-Kyu Park; Oh-Sung Kwon; Young-Bin Kwon

**Author Affiliation:**   Chung-Ang Univ., Seoul, South Korea
**Book Title:**   Graphics Recognition, Methods and Applications. First International Workshop. Selected Papers
**Inclusive Page Numbers:**   179-89
**Publisher:**   Springer Verlag, Berlin
**Country of Publication:**   Germany
**Publication Date:**   1996
**Conference Title:**   Proceedings of Workshop on Graphics Recognition
**Conference Date:**   10-11 Aug. 1995
**Conference Location:**   University Park, PA, USA
**Editor(s):**   Kasturi, R.; Tombre, K.
**ISBN:**   3 540 61226 2
**Number of Pages:**   x+308
**Language:**   English
**Document Type:**   Conference Paper (PA)
**Treatment:**   Application (A); Practical (P)

**Abstract:**   In this paper, we describe an automatic region labeling method, which identifies each region and recognizes region names. Before tracing the region boundaries, it extracts the region names which consist of characters, dots, **dashes**, and indication lines. It uses two **recognition** methods to **recognize characters** in the region name. In the case of **recognizing** the isolated **characters**, it uses the open and close features. The **characters** touching boundaries are **recognized** by template matching. After removing the components of region names from a map image, the boundaries of each region are extracted. After which it then vectorizes the region boundaries. From these recognition results, the original map can be constructed. It reduces the storage to one fifth of the original data. The proposed method shows 95% accuracy of region labeling  ( *8 refs.*)

**Subfile(s):**   B (Electrical & Electronic Engineering); C (Computing & Control Engineering)
**Descriptors:**   geographic information systems; pattern recognition
**Identifiers:**   automatic region labeling method; region boundaries; dashes; indication lines; isolated characters; template matching
**Classification Codes:**   B6140C (Optical information, image and video signal processing); C7840 (Geography and cartography computing); C1250 (Pattern recognition)
**INSPEC Update Issue:**   1996-024
**Copyright:**   1996, IEE

**Abstract:**   ...labeling method, which identifies each region and recognizes region names. Before tracing the region boundaries, it extracts the region names which consist of characters, dots, **dashes**, and indication lines. It uses two **recognition** methods to **recognize characters** in the region name. In the case of **recognizing** the isolated **characters**, it uses the open and close features. The **characters** touching boundaries are **recognized** by template matching. After removing the components of region names from a map image, the boundaries of each region are extracted. After which it then

## II. Inventor Search

### A. Dialog

**File 347:JAPIO Dec 1976-2009/Jul(Updated 091030)**
   (c) 2009 JPO & JAPIO
**File 348:EUROPEAN PATENTS 1978-200945**
   (c) 2009 European Patent Office
**File 349:PCT FULLTEXT 1979-2009/UB=20091029|UT=20091022**
   (c) 2009 WIPO/Thomson
**File 350:Derwent WPIX 1963-2009/UD=200970**
   (c) 2009 Thomson Reuters

```
Set      Items   Description
S1       62296   AU=(WAIDA, T? OR EGUCHI, S? OR KANAMOTO, K? OR YABUKI, M? OR CHIBA,
K? OR KOBARA, K? OR YAMAMOTO, K? OR KATSUMATA, Y? OR WAIDA T? OR EGUCHI  S? OR
KANAMOTO K? OR  YABUKI M? OR CHIBA K? OR KOBARA K? OR YAMAMOTO K? OR KATSUMATA Y?)

S2          2    S1 AND HYPHEN?
```

2/3K/2 (Item 1 from file: 348)
DIALOG(R)File 348: EUROPEAN PATENTS
(c) 2009 European Patent Office. All rights reserved.

01974020

**Method and program for linking different applications through data displayed on screen**
Verfahren und Programm zur Verknupfung von Anwendungen durch am Bildschirm dargestellte Daten
Procede et logiciel pour connecter des logiciels d'application a travers des donnees presentees sur un
ecran

**Patent Assignee:**

*   **FUJITSU LIMITED**; (211463)
    1-1, Kamikodanaka 4-chome, Nakahara-ku; Kawasaki-shi,Kanagawa 211-8588; (JP)
    (Applicant designated States: all)

- **Fujitsu Frontech Limited**; (4350050)
  1776, Yanokuchi; Inagi-shi,Tokyo 206-8555; (JP)
  (Applicant designated States: all)

**Inventor:**

- **Maeta, Takayuki**
  Fujitsu Frontech Limited1776, Yanokuchi; Inagi-shiTokyo 206-8555; (JP)
- **Katsumata, Yutaka**
  **Fujitsu Frontech Limited1776, Yanokuchi; Inagi-shiTokyo 206-8555; (JP)**
- **Eguchi, Shinichi**
  **Fujitsu Frontech Limited1776, Yanokuchi; Inagi-shiTokyo 206-8555; (JP)**
- **...JP)**
  ; ;
- **Katsumata, Yutaka...**
  ; ;

**Legal Representative:**

- **HOFFMANN EITLE (101511)**
  Patent- und Rechtsanwalte Arabellastrasse 4; 81925 Munchen; (DE)

|  | Country | Number | Kind | Date |  |
|---|---|---|---|---|---|
| Patent | EP | 1591894 | A2 | 20051102 | (Basic) |
|  | EP | 1591894 | A3 | 20070822 |  |
| Application | EP | 2004022712 |  | 20040923 |  |
| Priorities | JP | 2004101435 |  | 20040330 |  |

**Designated States:**
AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IT; LI; LU; MC;
NL; PL; PT; RO; SE; SI; SK; TR;

**Extended Designated States:**
AL; HR; LT; LV; MK;

**International Patent Class (V7):** G06F-009/46

| International Classification (Version 8) IPC | Level | Value | Position | Status | Version | Action | Source | Office |
|---|---|---|---|---|---|---|---|---|
| G06F-0009/46 | A | I | F | B | 20060101 | 20050914 | H | EP |

**Abstract Word Count:** 150
**NOTE:** 1
**NOTE: Figure number on first page:** 1

| Legal Status Type | Pub. Date | Kind | Text |
|---|---|---|---|

Language Publication: English

Procedural:              English

Application:             English

| Fulltext Availability | Available Text | Language | Update | Word Count |
|---|---|---|---|---|
| CLAIMS A | | (English) | 200544 | 1007 |
| SPEC A | | (English) | 200544 | 6664 |
| Total Word Count (Document A) 7672 | | | | |
| Total Word Count (Document B) 0 | | | | |
| Total Word Count (All Documents) 7672 | | | | |

**Specification:** ...window Wr. At this time, since the CIF number of "042-631682" does not match the input specifications of the seal checking program 60, the **hyphen** (symbol -) of the CIF number retrieved from the window Wr is deleted into 9-digit numeral of "042631682". The above-mentioned client name, the converted...shown in FIG. 5. Then, in step 138, the data conversion method of the item is specified. For example, as shown in FIG. 8, "removing '-' (**hyphen**)" for a CIF number, "refer to a table for replacement of a value" for a check result, and "yyyy/mm/dd to be replaced with...

File 485:Accounting & Tax DB 1971-2009/Oct W4
    (c) 2009 ProQuest Info&Learning
File 625:American Banker Publications 1981-2008/Jun 26
    (c) 2008 American Banker
File 268:Banking Info Source 1981-2009/Oct W4
    (c) 2009 ProQuest Info&Learning
File 626:Bond Buyer Full Text 1981-2008/Jul 07
    (c) 2008 Bond Buyer
File 267:Finance & Banking Newsletters 2008/Sep 29
    (c) 2008 Dialog
File 15:ABI/Inform(R) 1971-2009/Nov 04
    (c) 2009 ProQuest Info&Learning
File 9:Business & Industry(R) Jul/1994-2009/Nov 04
    (c) 2009 Gale/Cengage
File 610:Business Wire 1999-2009/Nov 05
    (c) 2009 Business Wire.
File 810:Business Wire 1986-1999/Feb 28
    (c) 1999 Business Wire
File 275:Gale Group Computer DB(TM) 1983-2009/Oct 06
    (c) 2009 Gale/Cengage
File 624:McGraw-Hill Publications 1985-2009/Nov 05
    (c) 2009 McGraw-Hill Co. Inc
File 621:Gale Group New Prod.Annou.(R) 1985-2009/Sep 28
    (c) 2009 Gale/Cengage

File 636:Gale Group Newsletter DB(TM) 1987-2009/Oct 12
    (c) 2009 Gale/Cengage
File 613:PR Newswire 1999-2009/Nov 05
    (c) 2009 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
    (c) 1999 PR Newswire Association Inc
File  16:Gale Group PROMT(R) 1990-2009/Oct 12
    (c) 2009 Gale/Cengage
File 160:Gale Group PROMT(R) 1972-1989
    (c) 1999 The Gale Group
File 634:San Jose Mercury  Jun 1985-2009/Oct 28
    (c) 2009 San Jose Mercury News
File 148:Gale Group Trade & Industry DB 1976-2009/Oct 19
    (c) 2009 Gale/Cengage
File  20:Dialog Global Reporter 1997-2009/Nov 05
    (c) 2009 Dialog
File  35:Dissertation Abs Online 1861-2009/Sep
    (c) 2009 ProQuest Info&Learning
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
    (c) 2002 Gale/Cengage
File  65:Inside Conferences 1993-2009/Nov 05
    (c) 2009 BLDSC all rts. reserv.
File   2:INSPEC 1898-2009/Oct W4
    (c) 2009 The IET
File 474:New York Times Abs 1969-2009/Nov 05
    (c) 2009 The New York Times
File 475:Wall Street Journal Abs 1973-2009/Nov 05
    (c) 2009 The New York Times
File  99:Wilson Appl. Sci & Tech Abs 1983-2009/Oct
    (c) 2009 The HW Wilson Co.
File 256:TecTrends 1982-2009/Nov W1
    (c) 2009 Info.Sources Inc. All rights res.
File 139:EconLit 1969-2009/Oct
    (c) 2009 American Economic Association
File 169:Insurance Periodicals 1984-1999/Nov 15
    (c) 1999 NILS Publishing Co.


Set    Items   Description
S1      8647   AU=(WAIDA, T? OR EGUCHI, S? OR KANAMOTO, K? OR YABUKI, M? OR CHIBA,
K? OR KOBARA, K? OR YAMAMOTO, K? OR KATSUMATA, Y? OR WAIDA T? OR EGUCHI  S? OR
KANAMOTO K? OR  YABUKI M? OR CHIBA K? OR KOBARA K? OR YAMAMOTO K? OR KATSUMATA Y?)

S2         0   S1 AND HYPHEN?

## III. Text Search Results from Dialog (Full Text dbs)

### A. Full-Text Databases – PATENT

**File 349:PCT FULLTEXT 1979-2009/UB=20091029|UT=20091022**
   **(c) 2009 WIPO/Thomson**
**File 348:EUROPEAN PATENTS 1978-200945**
   **(c) 2009 European Patent Office**

```
        S1      85906    (CHARACTER? OR LETTER? ? OR NUMBERS OR NUMERIC? OR
ALPHANUMERIC? OR TEXT OR FORM? ? OR HYPHEN? OR DASH?? OR PUNCTUATION?)(3N)(RECOGNI?
OR SEARCH? OR LOOK?()FOR OR IDENTIFY? OR DISCRIMINA? OR DISCERN?) OR OCR?


        S2       8826    HYPHEN? OR DASH?? OR HORIZONTAL(2W)(MARK?  OR CONNECTOR? ? OR
JOINER? ? OR SEPARATOR? ? OR PUNCTUAT? OR SYMBOL? ? OR DELIMIT?) OR MINUS()SIGN? ?
OR NUMBER()(SEPARATOR? OR BREAK OR DELIMIT?)


        S3      21911    (ACCOUNT? ? OR INVOICE? ? OR CUSTOMER? ? OR SERVICE? ? OR
PAYEE? OR PAYMENT? OR RECEIPT? OR CLIENT? ? OR CUSTOMER? ? OR TRANSACTION? OR
SUBSCRIBER? OR MEMBER?)(4X)(NUMBER? OR IDENTI? OR TAG OR TAGS OR TAG? OR CHARACTERS
OR DESCRIPTION? OR LABEL? OR INDEX? OR FORM? ? OR PRINTOUT? OR SHEET OR RECEIPT? OR
TYPE? OR CATEGOR? OR DISCRIMINAT? OR DESIGNATION? )


        S4      21776    MATCH? OR CORRESPOND? OR LINK? OR CONNECT? OR RELATED OR
SAME()AS OR COMPAR? OR IDENTICAL OR DISCRIMINAT?  OR PICK?()OUT


        S5         36    S2(12N)S3

        S6         14    S5 NOT AY>2000

        S7         14    IDPAT (sorted in duplicate/non-duplicate order)

        S8         14    IDPAT (primary/non-duplicate records only)

        S9       2152    S3(4X)S4
        S10        49    S9(3S)S2
        S11        40    S10 NOT S5
        S12        25    S11 NOT AY>2000
        S13        25    IDPAT (sorted in duplicate/non-duplicate order)
        S14        24    IDPAT (primary/non-duplicate records only)
```

14/3K/21 (Item 21 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT

00769406

**INTEGRATED BUSINESS-TO-BUSINESS WEB COMMERCE AND BUSINESS AUTOMATION SYSTEM**
SYSTEME INTEGRE D'AUTOMATISATION DES ECHANGES COMMERCIAUX ENTRE ENTREPRISES PAR L'INTERNET

**Patent Applicant/Inventor:**

- **WONG Charles**
  14250 Miranda Road, Los Altos Hills, CA 94022; US; US(Residence); US(Nationality)

**Legal Representative:**

- **COVERSTONE Thomas E(agent)**
  Burns, Doane, Swecker & Mathis, LLP, P.O. Box 1404, Alexandria, VA 22313-1404; US;

|  | Country | Number | Kind | Date |
|---|---|---|---|---|
| Patent | WO | 200102927 | A2-A3 | 20010111 |
| Application | WO | 2000US16739 |  | 20000616 |
| Priorities | US | 99334688 |  | 19990617 |

**Designated States:** (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK,
DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;
**Language** Publication Language: English

Filing Language:          English
Fulltext word count:      51133

## Claims:

...various graphing options are provided. In the illustrated example, the data is presented in the form of line graphs. Trend reports, aside from comparing one **account** to another over the **identical** period, may also **compare** the same account over different periods. Hence, in the case of both financial reports and trend analyses, an important feature is that the date range...assignment. Resulting data is supplied to at least three destinations: a Measuring Algorithm, a Historical Data Comparison Algorithm, and an output display structure, indicated
by **dashed** lines. The Measuring Algorithm compares actual performance todesired performance established by goals. Preferably, goals are set by employees in consultation with management. In an...system is typically interactive, via the web, but may also be through the exchange of data files,113such as ASCII files, as indicated in **dashed** lines in various places within Figure 165. Depending on the nature of the underlying business, the database may store an electronic catalog, created and maintained...

..........................................................................................................................................................................

**Dialog eLink:** Order File History
14/3K/5 (Item 5 from file: 348)
DIALOG(R)File 348: EUROPEAN PATENTS

00742494

**Method and apparatus for identifying words described in a page description language file**
Verfahren und Vorrichtung zur Identifizierung von Wortern, die in einer Datei in einer Seitenbeschreibungssprache kodiert sind
Procede et dispositif pour l'identification de mots decrits dans un langage de description de page

**Patent Assignee:**

- **ADOBE SYSTEMS INC.;** (1120810)
  1585 Charleston Road; Mountain View California 94039-7900; (US)
  (applicant designated states: DE;FR;GB;IT;NL;SE)

**Inventor:**

- **Ayers, Robert M.**
  679 Waverley Street; Palo Alto, California 94301; (US)

**Legal Representative:**

- **Wombwell, Francis et al (46021)**
  Potts, Kerr & Co. 15, Hamilton Square; Birkenhead Merseyside L41 6BR; (GB)

|  | Country | Number | Kind | Date |  |
|---|---|---|---|---|---|
| Patent | EP | 701223 | A2 | 19960313 | (Basic) |
|  | EP | 701223 | A3 | 19970528 |  |
| Application | EP | 95305330 |  | 19950731 |  |
| Priorities | US | 304762 |  | 19940912 |  |

**Designated States:**
DE; FR; GB; IT; NL; SE;

**International Patent Class (V7):** G06K-009/20; ; **Abstract Word Count:** 197

| Legal Status Type | Pub. Date | Kind | Text |
|---|---|---|---|

**Language** Publication: English

Procedural:          English

Application:          English

| Fulltext Availability Available Text | Language | Update | Word Count |
|---|---|---|---|
| CLAIMS A | (English) | EPAB96 | 1307 |
| SPEC A | (English) | EPAB96 | 10733 |
| Total Word Count (Document A) 12040 |  |  |  |
| Total Word Count (Document B) 0 |  |  |  |
| Total Word Count (All Documents) 12040 |  |  |  |

**Specification:** ...e., if the current word is a portion of a larger word that is continued on the next line, as in the case when a **hyphen** occurs at the end of the word fragment. The process of determining if the word is a word fragment is detailed with respect to Figure... ...above.

Alternatively, in step 80, the identified word can be compared to a search word sent to the process of Figure 4a-4b by the **client**. If the **identified** word **matches** the search word, the identified word can be stored in a matched word list. Approximate matches, such as matching a search word to an identified ...

01014239

**SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR PATENT-CENTRIC AND GROUP-ORIENTED DATA PROCESSING**
SYSTEM, VERFAHREN UND PROGRAMMPRODUKT ZUR GRUPPENORGANISIERTEN DATENVERARBEITUNG VON PATENTEN
SYSTEME, PROCEDE, ET PRODUIT DE PROGRAMMES INFORMATIQUES POUR LE TRAITEMENT DE DONNEES AXES SUR DES BREVETS D'INVENTION

**Patent Assignee:**

- **Rose Blush Software LLC**; (5579220)
  171 Main Street Nber 271; Los Altos, CA 94022; (US)
  (Proprietor designated states: all)

**Inventor:**

- **RIVETTE, Kevin, G.**
  2165 Waverley Street; Palo Alto, CA 94303; (US)
- **RAPPAPORT, Irving, S.**
  1500 Edgewood Drive; Palo Alto, CA 94303; (US)
- **HOHMANN, Luke**
  306 Windmill Park Lane; Mountain View, CA 94043; (US)
- **PUGLIA, David**
  17429 East Vineland Avenue; Los Gatos, CA 95030; (US)
- **GORETSKY, David**
  272 Waverly Street; Sunnyvale, CA 94086; (US)
- **JACKSON, Adam**
  1063 Morse Avenue 7-107; Sunnyvale, CA 94089; (US)
- **RABB, Charles, Jr.**
  730 E. Evelyn 638; Sunnyvale, CA 94086; (US)
- **SMITH, David, W.**
  3 Morning Sun Court; Mountain View, CA 94043; (US)
- **PARK, Brian**
  4029 Park Boulevard; Palo Alto, CA 94306; (US)
- **THORNTHWAITE, Warren**
  147 Hedge Road; Menlo Park, CA 94025; (US)
- **NAVARRETE, Jorge, A.**
  160 Hedge Road; Menlo Park, CA 94025; (US)

**Legal Representative:**

- **Brinck, David John Borchardt et al (9255631)**
  R.G.C. Jenkins & Co 26 Caxton Street; London SW1H 0RJ; (GB)

|  | Country | Number | Kind | Date |  |
|---|---|---|---|---|---|
| Patent | EP | 986789 | A1 | 20000322 | (Basic) |
|  | EP | 986789 | B1 | 20020918 |  |
|  | EP | 986789 | B2 | 20090121 |  |
|  | WO | 1998055945 |  | 19981210 |  |
| Application | EP | 98930054 |  | 19980602 |  |
|  | WO | 98US10923 |  | 19980602 |  |
| Priorities | US | 867392 |  | 19970602 |  |
|  | US | 921369 |  | 19970829 |  |

**Designated States:**
AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LI; LU; MC; NL; PT; SE;

**Related Divisions: Patent (Application):**EP 1184798 (EP 2001124936)

**International Patent Class (V7):** G06F-017/30

| International Classification (Version 8) IPC | Level | Value | Position | Status | Version | Action | Source | Office |
|---|---|---|---|---|---|---|---|---|
| G06F-0017/30 | A | I | F | B | 20060101 | 19990225 | H | EP |

**NOTE:** No A-document published by EPO

| Legal Status Type | Pub. Date | Kind | Text |
|---|---|---|---|

**Language** Publication: English
Procedural:              English
Application:              English

| Fulltext Availability Available Text | Language | Update | Word Count |
|---|---|---|---|
| CLAIMS B | (English) | 200904 | 117 |
| CLAIMS B | (German) | 200904 | 95 |
| CLAIMS B | (French) | 200904 | 148 |
| SPEC B | (English) | 200904 | 73852 |
| Total Word Count (Document A) 0 | | | |
| Total Word Count (Document B) 74212 | | | |
| Total Word Count (All Documents) 74212 | | | |

**Specification:** ...of the present invention; FIG. 114 is a architecture block diagram of the network client (and in some embodiments the web **client**); FIG. 115 is used to describe a generic group import function ofthe present invention; FIG. 116 is...for purposes of illustration, and not limitation. As mentioned

above, the document databases 612 store electronic representations of documents that are of interest to the **customer**. Accordingly, the **types** of document databases 612 and the contents of the document databases 612 are, by definition, customer and implementation specific. Document Bibliographic Databases

The document bibliographic...by five digits. Assume that the information in the patent text file 4604 was as follows: PP-11111 (for illustrative purposes, spaces are indicated as **dashes**). This patent number is not in the proper format because five digits do not immediately follow the PP token. Instead, there is a space between... ...format of a class/subclass in the patent text file 4604 is as follows: XCL---17-34-2 (for illustrative purposes, spaces are indicated as **dashes**). Therefore, in the patent text file 4604, a class/subclass is denoted by the token XCL, followed by two spaces. Three characters follow this token...

?

8/3K/3 (Item 3 from file: 348)
DIALOG(R)File 348: EUROPEAN PATENTS
(c) 2009 European Patent Office. All rights reserved.
00655907

**System and method for processing telephone numbers.**
System und Verfahren zum Verarbeiten von Telephonnummern.
Systeme et methode pour le traitement des numeros de telephone.

**Patent Assignee:**

- **MICROSOFT CORPORATION**; (749861)
  One Microsoft Way; Redmond, Washington 98052-6399; (US)
  (applicant designated states: DE;FR;GB)

**Inventor:**

- **Nixon, Toby L.**
  13920 120th Avenue Northeast; Kirkland, Washington 98034; (US)
- **Menezes, Arul A.**
  13930 Northeast 13th Street No.6-2; Bellevue, Washington 98005; (US)

**Legal Representative:**

- **Patentanwalte Grunecker, Kinkeldey, Stockmair & Partner (100721)**
  Maximilianstrasse 58; D-80538 Munchen; (DE)

|  | Country | Number | Kind | Date | |
|---|---|---|---|---|---|
| Patent | EP | 631418 | A1 | 19941228 | (Basic) |
| Application | EP | 94109756 | | 19940623 | |
| Priorities | US | 170999 | | 19930624 | |
| | US | 148057 | | 19931105 | |

**Designated States:**
DE; FR; GB;

**International Patent Class (V7):** H04M-003/00; ; **Abstract Word Count:** 167

| Legal Status Type | Pub. Date | Kind | Text |
|---|---|---|---|

**Language** Publication: English

Procedural:            English

Application:            English

| Fulltext Availability Available Text | Language | Update | Word Count |
|---|---|---|---|
| CLAIMS A | (English) | EPABF2 | 4520 |
| SPEC A | (English) | EPABF2 | 10095 |
| Total Word Count (Document A) 14615 | | | |
| Total Word Count (Document B) 0 | | | |
| Total Word Count (All Documents) 14615 | | | |

**Specification:** ...The expansion analyzer 54 uses this information to determine that the first digit segment, contained within the parentheses, is an area code, and that the **hyphen** divides the **subscriber number** into the exchange prefix and the individual telephone number. Any digits that precede the digit segment contained with the parentheses (i.e., the area code...

**Dialog eLink:** Order File History
8/3K/5 (Item 5 from file: 348)
DIALOG(R)File 348: EUROPEAN PATENTS
(c) 2009 European Patent Office. All rights reserved.

00212974

**System for accounting for postage expended by a postage meter having data security during printing.**
System zur Verbuchung der Postgebuhren, die durch eine mit Datensicherstellung wahrend des Druckvorganges versehenen Frankiermaschine verbraucht werden.

Systeme pour comptabiliser la taxe postale depensee par une machine a affranchir munie de moyens de protection des donnees pendant l'impression.

**Patent Assignee:**

- **PITNEY BOWES INC.**; (244950)
  One Elmcroft; Stamford Connecticut 06926-0790; (US)
  (applicant designated states: CH;DE;FR;GB;LI)

**Inventor:**

- **Mallozzi, Joseph D.**
  112 Teeter Rock Street; Trumbull, Conn. 06611; (US)
- **Hutcheson, Neale C.**
  205 Park Street; New Canaan, Conn. 06840; (US)
- **Breault, Michelle S.**
  199 Osborne Hill Road; Fairfield, Conn. 06430; (US)
- **Daniels, Edward P.**
  350 Stonehouse Road; Trumbull, Conn. 06611; (US)

**Legal Representative:**

- **Hansen, Bernd, Dr.rer.nat. et al (4922)**
  Hoffmann, Eitle & Partner Patentanwalte Arabellastrasse 4 Postfach 81 04 20; W-8000 Munchen 81; (DE)

|  | Country | Number | Kind | Date |  |
|---|---|---|---|---|---|
| Patent | EP | 230658 | A2 | 19870805 | (Basic) |
|  | EP | 230658 | A3 | 19871216 |  |
|  | EP | 230658 | B1 | 19910828 |  |
| Application | EP | 86118032 |  | 19861224 |  |
| Priorities | US | 813458 |  | 19851226 |  |

**Designated States:**
CH; DE; FR; GB; LI;

**International Patent Class (V7):** G07B-017/02; ; **Abstract Word Count:** 270

| Legal Status Type | Pub. Date | Kind | Text |
|---|---|---|---|

**Language** Publication: English

Procedural:            English

Application:           English

| Fulltext Availability Available Text | Language | Update | Word Count |
|---|---|---|---|

| Fulltext Availability Available Text | Language | Update | Word Count |
|---|---|---|---|
| CLAIMS B | (English) | EPBBF1 | 1288 |
| CLAIMS B | (German) | EPBBF1 | 1216 |
| CLAIMS B | (French) | EPBBF1 | 1449 |
| SPEC B | (English) | EPBBF1 | 5846 |
| Total Word Count (Document A) 0 | | | |
| Total Word Count (Document B) 9799 | | | |
| Total Word Count (All Documents) 9799 | | | |

**Specification:** ...16-4 and used to specify numeric values such as account number, postage value, class, account, etc.

"." -used as a delimiter between dollars and cents.

"-" -**Hyphen**/minus, used as a **hyphen** within an **account number** and as a **minus sign** when editing account data.

RESET - Reset, used to exit the current function and return to the initial state.

CE/C- Clear Entry, used to clear...

---

**Dialog eLink:** Order File History
8/3K/11 (Item 11 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT
(c) 2009 WIPO/Thomson. All rights reserved.

00444834

**BIOMETRIC CHECK VERIFICATION SYSTEM**
SYSTEME BIOMETRIQUE DE VERIFICATION DE CHEQUES

**Patent Applicant/Patent Assignee:**

- **MR PAYROLL CORPORATION**

**Inventor(s):**

- **STINSON Michael C**
- **TEMPLER John W Jr**
- **CLOWER Dyron**

| | Country | Number | Kind | Date |
|---|---|---|---|---|
| Patent | WO | 9835298 | A1 | 19980813 |
| Application | WO | 98US2017 | | 19980206 |
| Priorities | US | 9736923 | | 19970206 |
| | US | 97854321 | | 19970512 |

**Designated States:** (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY,
CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI,
GB, GE, GH, GM, GW, HU, ID, IL, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW,
GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE,
CH, DE, DK, ES, FI, FR, GB, GR, IE, IT,
LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, ML, MR, NE, SN, TD, TG

**Language** Publication Language: English

Filing Language:

Fulltext word count:          12912


**Detailed Description:**

...a cash
dispensing module 330 to dispense an appropriate amount
of cash to the customer through the cash dispenser 135.

The processor 300 provides the **customer** with a **receipt**
through the printer 140. As indicated by the **dashed**
lines in Fig. 3 and illustrated in Fig. 3A, the touch
screen 105, the keypad 110, deposit processing module
315, the check reader 130, the...




?

## B. Full-Text Databases – NON-PATENT

**File 485:Accounting & Tax DB 1971-2009/Nov W1**
    **(c) 2009 ProQuest Info&Learning**
**File 625:American Banker Publications 1981-2008/Jun 26**
    **(c) 2008 American Banker**
**File 268:Banking Info Source 1981-2009/Nov W1**
    **(c) 2009 ProQuest Info&Learning**
**File 626:Bond Buyer Full Text 1981-2008/Jul 07**
    **(c) 2008 Bond Buyer**
**File 267:Finance & Banking Newsletters 2008/Sep 29**
    **(c) 2008 Dialog**
**File  15:ABI/Inform(R) 1971-2009/Nov 05**
    **(c) 2009 ProQuest Info&Learning**
**File   9:Business & Industry(R) Jul/1994-2009/Nov 05**
    **(c) 2009 Gale/Cengage**
**File 610:Business Wire 1999-2009/Nov 06**
    **(c) 2009 Business Wire.**
**File 810:Business Wire 1986-1999/Feb 28**
    **(c) 1999 Business Wire**
**File 275:Gale Group Computer DB(TM) 1983-2009/Oct 07**
    **(c) 2009 Gale/Cengage**
**File 624:McGraw-Hill Publications 1985-2009/Nov 05**
    **(c) 2009 McGraw-Hill Co. Inc**
**File 621:Gale Group New Prod.Annou.(R) 1985-2009/Sep 29**
    **(c) 2009 Gale/Cengage**
**File 636:Gale Group Newsletter DB(TM) 1987-2009/Oct 13**
    **(c) 2009 Gale/Cengage**
**File 613:PR Newswire 1999-2009/Nov 06**
    **(c) 2009 PR Newswire Association Inc**
**File 813:PR Newswire 1987-1999/Apr 30**
    **(c) 1999 PR Newswire Association Inc**
**File  16:Gale Group PROMT(R) 1990-2009/Oct 13**
    **(c) 2009 Gale/Cengage**
**File 160:Gale Group PROMT(R) 1972-1989**
    **(c) 1999 The Gale Group**
**File 634:San Jose Mercury  Jun 1985-2009/Oct 28**
    **(c) 2009 San Jose Mercury News**
**File 148:Gale Group Trade & Industry DB 1976-2009/Oct 20**
    **(c) 2009 Gale/Cengage**
**File  20:Dialog Global Reporter 1997-2009/Nov 06**
    **(c) 2009 Dialog**

```
Set    Items   Description
```

```
S1      304781   (CHARACTER? OR LETTER? ? OR NUMBERS OR NUMERIC? OR ALPHANUMERIC? OR
TEXT  OR FORM? ? OR HYPHEN? OR DASH?? OR PUNCTUATION?)(3N)(RECOGNI? OR SEARCH? OR
LOOK?()FOR OR IDENTIFY? OR DISCRIMINA? OR DISCERN?) OR OCR?


S2        4376   HYPHEN? OR DASH?? OR HORIZONTAL(2W)(MARK?  OR CONNECTOR? ? OR
JOINER? ? OR SEPARATOR? ? OR PUNCTUAT? OR SYMBOL? ? OR DELIMIT?) OR MINUS()SIGN? ?
OR NUMBER()(SEPARATOR? OR BREAK OR DELIMIT?)


S3       24790   (ACCOUNT? ? OR INVOICE? ? OR CUSTOMER? ? OR SERVICE? ? OR PAYEE? OR
 PAYMENT? OR RECEIPT? OR CLIENT? ? OR CUSTOMER? ? OR TRANSACTION? OR SUBSCRIBER? OR
 MEMBER?)(4X)(NUMBER? OR IDENTI? OR TAG OR TAGS OR TAG? OR CHARACTERS OR
DESCRIPTION? OR  LABEL? OR INDEX? OR FORM? ? OR PRINTOUT? OR SHEET OR RECEIPT? OR
TYPE? OR CATEGOR? OR DISCRIMINAT? OR DESIGNATION? )


S4       19093   MATCH? OR CORRESPOND? OR LINK? OR CONNECT? OR RELATED OR SAME()AS
OR COMPAR? OR IDENTICAL OR DISCRIMINAT?  OR PICK?()OUT


S5          21   S2(S)S3
S6          16   S5 NOT PY>2000
S7           9   RD  (unique items)
S8        3106   S4(12N)S3
S9           5   S8(S)S2
S10          5   S9 NOT S5
S11          1   S10 NOT PY>2000
S12         10   S11 OR S7
```

12/3,K/4 (Item 2 from file: 275)
DIALOG(R)File 275: Gale Group Computer DB(TM)

01379643    **Supplier Number:** 09549631 **(Use Format 7 Or 9 For** FULL TEXT )
**"I threw away my checkbook." (CheckFree's electronic bill-paying service) (includes related articles on the Accuret reconciliation service and guidelines for electronic bill-paying)**

Shipley, Chris
PC-Computing , v3 , n11 , p112(7)
Nov , 1990
ISSN: 0899-1847
**Language:** ENGLISH     **Record Type:** FULLTEXT; ABSTRACT
**Word Count:** 3608   **Line Count:** 00275

```
...name. When the merchant couldn't figure out which account to credit, it
returned the check to me.
     While CheckFree should be able to handle account
numbers up to 22 characters long, in this case it was
apparently thrown off by the spacing between sets of digits. Removing the
spaces solved the problem. Even though merchants print spaces or
dashes between digits in account numbers, you don't
need to include them in the account numbers you enter. For
example, 999-000-0099 becomes 9990000099.
     Aside from those glitches, CheckFree has worked wonderfully.
Merchants get their money on the day I...
```

12/3,K/1 (Item 1 from file: 485)
DIALOG(R)File 485: Accounting & Tax DB

**\*\* FULL-TEXT AVAILABLE IN FORMATS 7 AND 9 \*\***
00615198
**Accounting for practitioners takes the spreadsheet approach**

Giovetti, Alfred C
Accounting Technology  v13 n3  pp: 55-57  Apr 1997
**ISSN:** 0883-1866  **Journal Code:** CIA
**Word Count:** 2006 **Line Count:** 182 Accounting & Tax DB_1971-2009/Nov W1
 **Supplier Number: Text:**
```
...531,440 account numbers, with one additional number reserved for the out
of balance condition. That should be plenty for most simple applications.

To add account numbers to the template, you simply add a line
to the chart of accounts shown in the trial balance. Conversely, you can
remove account numbers by removing a line from the COA. When
printing, AFP doesn't give you an option to not print accounts without
balances, but it does allow you to print these accounts with dashes
instead of zeros.

Mounties to the rescue

The 115-page user's manual is relatively short for a write-up package, and
it has no...
```

12/3,K/2 (Item 1 from file: 15)
DIALOG(R)File 15: ABI/Inform(R)

01084169        97-33563
**Finding case studies online**

Ojala, Marydee
Online  v19n5  pp: 32-36
Sep/Oct 1995
**ISSN:** 0146-5422  **Journal Code:** ONL
**Word Count:** 3039
**Text:**
```
...for "client" and one for "server," just as if you had searched client,
hit number of records with "server" in
```

them--anywhere in them. If you are searching DataStar, substitute **hyphens** for any type of punctuation, including slashes, in the descriptor term. For this example, the search is cLient-server-architecture. In Dow Jones, use the...

## IV. <u>Text Search Results from Dialog (Abstract dbs)</u>

### A. Abstract Databases -- Patent

**File 347:JAPIO Dec 1976-2009/Jul(Updated 091030)**
    **(c) 2009 JPO & JAPIO**
**File 350:Derwent WPIX 1963-2009/UD=200970**
    **(c) 2009 Thomson Reuters**

```
Set      Items    Description
S1       105952   (CHARACTER? OR LETTER? ? OR NUMBERS OR NUMERIC? OR ALPHANUMERIC? OR
TEXT  OR FORM? ? OR HYPHEN? OR DASH?? OR PUNCTUATION?)(3N)(RECOGNI? OR SEARCH? OR
LOOK?()FOR OR IDENTIFY? OR DISCRIMINA? OR DISCERN?) OR OCR?

S2         119   S HYPHEN? OR DASH?? OR HORIZONTAL(2W)(MARK?  OR CONNECTOR? ? OR
JOINER? ? OR SEPARATOR? ? OR PUNCTUAT? OR SYMBOL? ?) OR MINUS()SIGN? ? OR
NUMBER()(SEPARATOR? OR BREAK)

S3        3107   (ACCOUNT? ? OR INVOICE? ? OR CUSTOMER? ? OR SERVICE? ? OR PAYEE? OR
 PAYMENT? OR RECEIPT? OR CLIENT? ? OR CUSTOMER? ? OR TRANSACTION? OR SUBSCRIBER? OR
 MEMBER?)(4X)(NUMBER? OR IDENTI? OR TAG OR TAGS OR TAG? OR CHARACTERS OR
DESCRIPTION? OR  LABEL? OR INDEX? OR FORM? ? OR PRINTOUT? OR SHEET OR RECEIPT? OR
TYPE? OR CATEGOR? OR  DISCRIMINAT? OR DESIGNATION? )

S4        2281   MATCH? OR CORRESPOND? OR LINK? OR CONNECT? OR RELATED OR SAME()AS
OR  COMPAR? OR IDENTICAL OR DISCRIMINAT?  OR PICK?()OUT

S5           5   S2 AND S3
S6           2   S5 NOT AY>2000
```

6/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX
(c) 2009 Thomson Reuters. All rights reserved.
0009767995 *Drawing available*
WPI Acc no: 2000-055248/200005
Related WPI Acc No: 2000-025566
XRPX Acc No: N2000-043196
**Calling party number display system for telephones receiving international calls**
Patent Assignee: SIEMENS INFORMATION & COMMUNICATIONS NET (SIEI)
Inventor: KUCMEROWSKI D L; MULLER H; VANDER MEIDEN D A

| Patent Number | Kind | Date | Family | Application Number | Kind ) | Date | Update | Type |
|---|---|---|---|---|---|---|---|---|

| EP 961463 | A2 | 19991201 | EP 1999109024 | A | 19990507 | 200005 | B |
|---|---|---|---|---|---|---|---|

Priority Applications (no., kind, date): US 199885365 A 19980526

<table>
<tr><th colspan="6">Patent Details</th></tr>
<tr><th>Patent Number</th><th>Kind</th><th>Lan</th><th>Pgs</th><th>Draw</th><th>Filing Notes</th></tr>
<tr><td>EP 961463</td><td>A2</td><td>EN</td><td>11</td><td>6</td><td></td></tr>
<tr><td>Regional Designated States,Original</td><td colspan="5">AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI</td></tr>
</table>

Original Publication Data by AuthorityArgentina**Publication No. ...Original Abstracts:**party telephone network (20).The parsing of the calling party numbers (410) into fields introduces field separator characters between the fields including delimiters such as **dashes**, spaces, parenthetical, graphical **characters** and the like to separate destination codes from **subscriber numbers** according to **international**, **country**, national or regional fields, such as the North American Numbering Plan.

**Dialog eLink:** Order File History
6/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350: Derwent WPIX
(c) 2009 Thomson Reuters. All rights reserved.

0009739761 *Drawing available*
WPI Acc no: 2000-025566/200003
Related WPI Acc No: 2000-055248
XRPX Acc No: N2000-019208
**Partitioning of display for calling party numbers during information communication**
Patent Assignee: SIEMENS COMMUNICATIONS INC (SIEI); SIEMENS INFORMATION & COMMUNICATIONS NET (SIEI)
Inventor: FANDMEIDON D A; KOUCKMEROFSKI D L; KUCMEROWSKI D L; MULLER H; VANDER MEIDEN D A

| Patent Number | Kind | Date | Application Number | Kind | Date | Update | Type |
|---|---|---|---|---|---|---|---|
| CN 1156133 | C | 20040623 | Patent Family 27 countries | A | 19991216 | 200612 | E |
| EP 961464 | A2 | 19991201 | EP 1999109025 | A | 19990507 | 200003 | B |
| DE 69928899 | A2 | 20060623 | DE 699885965 | A | 19980506 | 200643 | E |
| CN 1261752 | A | 20000802 | CN 1999126406 | A | 19990306 | 200058 | E |
| US 6205213 | B1 | 20010320 | US 199885365 | A | 19980526 | 200118 | E |
| | | | US 1998216627 | A | 19981216 | | |
| EP 961464 | B1 | 20051130 | EP 1999109025 | A | 19990507 | 200579 | E |

Priority Applications (no., kind, date): US 199885365 A 19980526; US 1998216627 A 19981216; EP 1999109025 A 19990507

| Patent Details | | | | | | |
|---|---|---|---|---|---|---|
| **Patent Number** | **Kind** | **Lan** | **Pgs** | **Draw** | **Filing Notes** | |
| EP 961464 | A2 | EN | 14 | 9 | | |
| Regional Designated States,Original | AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI | | | | | |
| US 6205213 | B1 | EN | | | C-I-P of application | US 199885365 |
| | | | | | C-I-P of patent | US 5991383 |
| EP 961464 | B1 | EN | | | | |
| Regional Designated States,Original | DE FR GB IT | | | | | |
| DE 69928599 | E | DE | | | Application | EP 1999109025 |
| | | | | | Based on OPI patent | EP 961464 |
| DE 69928599 | T2 | DE | | | Application | EP 1999109025 |
| | | | | | Based on OPI patent | EP 961464 |

Original Publication Data by AuthorityArgentina**Publication No. ...Original Abstracts:**the calling party telephone network.The parsing of the calling party numbers into fields introduces field separator characters between the fields including delimiters such as **dashes**, spaces, parenthetical, graphical **characters** and the like to separate destination codes from **subscriber numbers**. In addition, **the delineation** information can be displayed, for example, in a second display line... ... the calling party telephone network. The parsing of the calling party numbers into fields introduces field separator characters between the fields including delimiters such as **dashes**, spaces, parenthetical, graphical characters and the like to **separate** destination codes from **subscriber numbers** according to international, country, national or regional **fields, such** as the North American Numbering Plan... ... the calling party telephone network. The parsing of the calling party numbers into fields introduces field separator characters between the fields including delimiters such as **dashes**, spaces, parenthetical, graphical characters and the like to separate **destination** codes from **subscriber numbers**. In addition, the delineation information can be displayed, **for example**, in a second display line.

?

## B. Abstract Databases – NON-PATENT

**File  35:Dissertation Abs Online 1861-2009/Sep**
 **(c) 2009 ProQuest Info&Learning**
**File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13**
 **(c) 2002 Gale/Cengage**
**File  65:Inside Conferences 1993-2009/Nov 05**
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**File   2:INSPEC 1898-2009/Oct W4**
 **(c) 2009 The IET**
**File 474:New York Times Abs 1969-2009/Nov 05**
 **(c) 2009 The New York Times**
**File 475:Wall Street Journal Abs 1973-2009/Nov 05**
 **(c) 2009 The New York Times**
**File  99:Wilson Appl. Sci & Tech Abs 1983-2009/Oct**
 **(c) 2009 The HW Wilson Co.**
**File 256:TecTrends 1982-2009/Nov W1**
 **(c) 2009 Info.Sources Inc. All rights res.**
**File 139:EconLit 1969-2009/Oct**
 **(c) 2009 American Economic Association**
**File 169:Insurance Periodicals 1984-1999/Nov 15**
 **(c) 1999 NILS Publishing Co.**

```
Set      Items    Description
S1       54310    (CHARACTER? OR LETTER? ? OR NUMBERS OR NUMERIC? OR ALPHANUMERIC? OR
TEXT OR FORM? ? OR HYPHEN? OR DASH?? OR PUNCTUATION?)(3N)(RECOGNI? OR SEARCH? OR
LOOK?()FOR OR IDENTIFY? OR DISCRIMINA? OR DISCERN?) OR OCR?

S2          93    HYPHEN? OR DASH?? OR HORIZONTAL(2W)(MARK?  OR CONNECTOR? ? OR
JOINER? ? OR SEPARATOR? ? OR PUNCTUAT? OR SYMBOL? ? OR DELIMIT?) OR MINUS()SIGN? ?
OR NUMBER()(SEPARATOR? OR BREAK OR DELIMIT?)

S3         394    (ACCOUNT? ? OR INVOICE? ? OR CUSTOMER? ? OR SERVICE? ? OR PAYEE? OR
PAYMENT? OR RECEIPT? OR CLIENT? ? OR CUSTOMER? ? OR TRANSACTION? OR SUBSCRIBER? OR
MEMBER?)(4X)(NUMBER? OR IDENTI? OR TAG OR TAGS OR TAG? OR CHARACTERS OR DESCRIPTION?
OR LABEL? OR INDEX? OR FORM? ? OR PRINTOUT? OR SHEET OR RECEIPT? OR TYPE? OR
CATEGOR? OR DISCRIMINAT? OR DESIGNATION? )

S4         196    MATCH? OR CORRESPOND? OR LINK? OR CONNECT? OR RELATED OR SAME()AS OR
COMPAR? OR IDENTICAL OR DISCRIMINAT?  OR PICK?()OUT

S5          66    S2 NOT PY>2000
S6           0    S5(S)S3
S7          51    S5(S)S1
S8          49    RD   (unique items)
S9           0    S8(S)S4
```

07919145
**Title:   Testing a word analysis system for reliable and sense-conveying hyphenation and other applications**
**Author(s):**   Schonhacker, M.; Kodydek, G.
**Author Affiliation:**   Inst. of Comput. Graphics, Vienna Univ. of Technol., Austria
**Book Title:**   Text, Speech and Dialogue. Third International Workshop, TSD 2000. Proceedings (Lecture Notes in Artificial Intelligence Vol.1902)
**Inclusive Page Numbers:**   127-32
**Publisher:**   Springer-Verlag, Berlin
**Country of Publication:**   Germany
**Publication Date:**   2000
**Conference Title:**   Text, Speech and Dialogue. Third International Workshop, TSD 2000. Proceedings
**Conference Date:**   13-16 Sept. 2000
**Conference Location:**   Brno, Czech Republic
**Editor(s):**   Sojka, P.; Kopecek, I.; Pala, K.
**ISBN:**   3 540 41042 2
**Number of Pages:**   xiii+463
**Language:**   English
**Document Type:**   Conference Paper (PA)
**Treatment:**   Practical (P)
**Abstract:**   In this article, we present a test environment for a word analysis system that is used for reliable and sense-conveying **hyphenation** of German words. A crucial task is the **hyphenation** of compound words, a huge set of those can readily be formed from existing words. Due to this fact, testing and checking all existing words for correct **hyphenation** is infeasible. Therefore we have developed special test methods for large text files which filter the few problematic cases from the complete set of analysed words. These methods include detecting unknown or ambiguous words, comparing the output of different versions of the word analysis system, and choosing dubious words according to other special criteria. The test system is also suited for testing other applications that are based on word analysis, such as full **text search**   ( *7 refs.* )
**Subfile(s):**   C (Computing & Control Engineering)
**Descriptors:**   computational linguistics; full-text databases; linguistics; testing; text analysis
**Identifiers:**   test environment; word analysis system; sense-conveying hyphenation; German words; compound words; large text files; unknown word detection; ambiguous word detection; dubious words; word analysis; full text search
**Classification Codes:**   C7820 (Humanities computing); C7240 (Information analysis and indexing ); C4210L (Formal languages and computational linguistics)
**INSPEC Update Issue:**   2001-018
**Copyright:**   2001, IEE
**Abstract:**   In this article, we present a test environment for a word analysis system that is used for reliable and sense-conveying **hyphenation** of German words. A crucial task is the **hyphenation** of compound words, a huge set of those can readily be formed from existing words. Due to this fact, testing

and checking all existing words for correct **hyphenation** is infeasible. Therefore we have developed special test methods for large text files which filter the few problematic cases from the complete set of analysed... ...words according to other special criteria. The test system is also suited for testing other applications that are based on word analysis, such as full **text search**

05526020
**Title:  Hybrid contextural text recognition with string matching**
**Author(s):**  Sinha, R.M.K.; Prasada, B.; Houle, G.F.; Sabourin, M.
**Author Affiliation:**  Indian Inst. of Technol., Kanpur, India
**Abstract:**  The hybrid contextural algorithm for reading real-life documents printed in varying fonts of any size is presented. **Text** is **recognized** progressively in three passes. The first pass is used to generate character hypothesis, the second to generate word hypothesis, and the third to verify the word hypothesis. During the first pass, isolated **characters** are **recognized** using a dynamic contour warping classifier. Transient statistical information is collected to accelerate the recognition process and to verify hypotheses in later processing. A transient dictionary consisting of high confidence nondictionary words is constructed in this pass. During the second pass, word-level hypotheses are generated using hybrid contextual text processing. Nondictionary words are recognized using a modified Viterbi algorithm, a string matching algorithm utilizing n grams, special handlers for touching characters, and pragmatic handlers for numerals, punctuation, **hyphens**, apostrophes, and a prefix/suffix handler. This processing usually generates several word hypothesis. During the third pass, word-level verification occurs  ( *22 refs.*)
**Subfile(s):**  C (Computing & Control Engineering)
**Descriptors:**  document image processing; optical character recognition
**Identifiers:**  progressive recognition; transient statistical information; hypothesis verification; text recognition; string matching; hybrid contextural algorithm; real-life documents; character hypothesis; word hypothesis; dynamic contour warping classifier; transient dictionary; modified Viterbi algorithm
**Classification Codes:**  C1250B (Character recognition); C5260B (Computer vision and image processing techniques); C6130D (Document processing techniques)

**INSPEC Update Issue:** 1993-045
**Copyright:** 1993, IEE

**Abstract:** The hybrid contextural algorithm for reading real-life documents printed in varying fonts of any size is presented. **Text** is **recognized** progressively in three passes. The first pass is used to generate character hypothesis, the second to generate word hypothesis, and the third to verify the word hypothesis. During the first pass, isolated **characters** are **recognized** using a dynamic contour warping classifier. Transient statistical information is collected to accelerate the recognition process and to verify hypotheses in later processing. A transient... ...are recognized using a modified Viterbi algorithm, a string matching algorithm utilizing n grams, special handlers for touching characters, and pragmatic handlers for numerals, punctuation, **hyphens**, apostrophes, and a prefix/suffix handler. This processing usually generates several word hypothesis. During the third pass, word-level verification occurs

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**Dialog eLink:**
8/5,K/19 (Item 12 from file: 2)
DIALOG(R)File 2: INSPEC

06017688
**Title:** An evaluation of an automatic markup system
**Author(s):** Taghva, K.; Condit, A.; Borsack, J.
**Author Affiliation:** Inf. Sci. Res. Inst., Nevada Univ., Las Vegas, NV, USA
**Journal:** Proceedings of the SPIE - The International Society for Optical Engineering , vol.2422 , pp.317-27
**Country of Publication:** USA
**Publication Date:** 1995
**Conference Title:** Document Recognition II
**Conference Date:** 6-7 Feb. 1995
**Conference Location:** San Jose, CA, USA
**Conference Sponsor:** SPIE Soc. Imaging Sci. & Technol
**ISSN:** 0277-786X
**CODEN:** PSISDG
**U.S. Copyright Clearance Center Code:** 0 8194 1769 6/95/$6.00
**Language:** English
**Document Type:** Conference Paper in Journal (PA)
**Treatment:** Practical (P)
**Abstract:** One predominant application of **OCR** is the **recognition** of full **text** documents for information retrieval. Modern retrieval systems exploit both the textual content of the document as well as its structure. The relationship between textual content and character accuracy have been the focus of recent studies. It has been shown that due to the redundancies in text, average precision and recall is not heavily affected by **OCR** character errors. What is not fully known is to what extent **OCR** devices can provide reliable information that can be used to capture the structure of the document. We present a preliminary report on the design and evaluation of a system to automatically markup technical documents, based on information provided by an **OCR** device. The device we use differs from

traditional **OCR** devices in that it not only performs optical **character recognition**, but also provides detailed information about page layout, word geometry, and font usage. Our automatic markup program, which we call Autotag, uses this information, combined with dictionary lookup and content analysis, to identify structural components of the text. These include the document title, author information, abstract, sections, section titles, paragraphs, sentences, and de-**hyphenated** words. A visual examination of the hardcopy will be compared to the output of our markup system to determine its correctness ( *19 refs.*)
**Subfile(s):** C (Computing & Control Engineering)
**Descriptors:** desktop publishing; document image processing; full-text databases; information retrieval; optical character recognition; word processing
**Identifiers:** automatic markup system evaluation; OCR character errors; full text document recognition; information retrieval; retrieval systems; textual content; character accuracy; OCR devices; technical documents; optical character recognition; page layout; word geometry; font usage; Autotag; dictionary lookup; content analysis
**Classification Codes:** C6130D (Document processing techniques ); C5260B (Computer vision and image processing techniques); C7250R (Information retrieval techniques); C5530 (Pattern recognition and computer vision equipment); C7108 (Desktop publishing)
**INSPEC Update Issue:** 1995-031
**Copyright:** 1995, IEE

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**Dialog eLink:** Open url
8/5,K/22 (Item 15 from file: 2)
DIALOG(R)File 2: INSPEC

05559006
**Title:** A solution for the automatic data capture of land register maps
**Author(s):** Boatto, L.; Consorti, V.; Del Buono, M.; Eramo, V.; Esposito, A.; Melcarne, F.; Meucci, M.; Mosciatti, M.; Tucci, M.
**Author Affiliation:** IBM Semea, Sci. & Tech. Solution Center, Roma, Italy
**Inclusive Page Numbers:** 70-5 vol.1
**Publisher:** American Soc. Photogrammetry & Remote Sensing, Bethesda , MA
**Country of Publication:** USA
**Publication Date:** 1992
**Conference Title:** GIS/LIS Proceedings
**Conference Date:** 10-12 Nov. 1992
**Conference Location:** San Jose, CA, USA
**Conference Sponsor:** American Congress Surveying & Mapping American Soc. Photogrammetry & Remote Sensing et al
**ISBN:** 0 944426 90 5
**Number of Pages:** 2 vol. xii+911
**Language:** English
**Document Type:** Conference Paper (PA)
**Treatment:** Practical (P)

**Abstract:** The authors describe an automatic system that extracts information from land register maps, in order to feed a GIS. The system identifies straight segments, **dashed** lines, text, symbols, hatching lines, etc. Line vectorization is performed with high accuracy and good noise immunity. **Characters** and symbols are **recognized** by a specific recognizer, which is scale and rotation invariant. Relationships between geometric entities are identified in order to produce a formal description of the drawing. The system is currently used by the Italian Land Register Authority as input to a GIS. Application architecture, system configuration, modes of operation, and performance data are reported ( *4 refs.*)
**Subfile(s):** C (Computing & Control Engineering)
**Descriptors:** cartography; geographic information systems; town and country planning
**Identifiers:** geographic information systems; land register maps; dashed lines; hatching lines; geometric entities; system configuration
**Classification Codes:** C7840 (Geography and cartography computing); C5260B (Computer vision and image processing techniques); C7130 (Public administration)
**INSPEC Update Issue:** 1993-050
**Copyright:** 1993, IEE
**Abstract:** The authors describe an automatic system that extracts information from land register maps, in order to feed a GIS. The system identifies straight segments, **dashed** lines, text, symbols, hatching lines, etc. Line vectorization is performed with high accuracy and good noise immunity. **Characters** and symbols are **recognized** by a specific recognizer, which is scale and rotation invariant. Relationships between geometric entities are identified in order to produce a formal description of the...

**Dialog eLink:** ⬛

8/5,K/39 (Item 32 from file: 2)
DIALOG(R)File 2: INSPEC
(c) 2009 The IET. All rights reserved.

01821543
**Title: A program to hyphenate English words**
**Author(s):** Ocker, W.A.
**Author Affiliation:** Graphic Systems Div., RCA Corp., Dayton, NJ , USA
**Journal:** IEEE Transactions on Professional Communications , vol.PC18 , no.2 , pp.78
**Country of Publication:** USA
**Publication Date:** June 1975
**ISSN:** 0361-1434
**CODEN:** IEPCBU
**Language:** English
**Document Type:** Journal Paper (JP)
**Treatment:** Application (A); Practical (P)
**Abstract:** **Hyphenation** programs used in computerized typesetting employ varied techniques-often in combination-to determine where to break the last word on a line. Usually, a dictionary lookup procedure is combined with a `logical **hyphenation** program' which bases its decisions on the **recognition** of certain **characters**, strings of characters, or patterns of vowels and consonants. The described program is such a logical routine. It is based on the word division rules of Webster's New International

Dictionary and recognizes prefixes, suffixes, and other letter combinations which require special processing, including strings which are likely to belong to accented syllables  ( *7 refs.*)
**Subfile(s):**  C (Computing & Control Engineering)
**Descriptors:**  computer controlled typesetting
**Identifiers:**  English words; computerized typesetting; dictionary lookup procedure; logical hyphenation program; word division rules; Webster's New International Dictionary; letter combinations
**Classification Codes:**  C7230 (Publishing and reproduction )
**INSPEC Update Issue:**  1975-009
**Copyright:**  1975, IEE
**Abstract:**  **Hyphenation** programs used in computerized typesetting employ varied techniques-often in combination-to determine where to break the last word on a line. Usually, a dictionary lookup procedure is combined with a `logical **hyphenation** program' which bases its decisions on the **recognition** of certain **characters**, strings of characters, or patterns of vowels and consonants. The described program is such a logical routine. It is based on the word division rules...

05176397
**Title:   Application of morphological filters to tackle discretisation artefacts**
**Author(s):**  van Overveld, C.W.A.M.
**Author Affiliation:**  Dept. of Math. & Comput. Sci., Eindhoven Univ. of Technol., Netherlands
**Journal:**  Visual Computer , vol.8 , no.4 , pp.217-32
**Country of Publication:**  Germany
**Publication Date:**  April 1992
**ISSN:**  0178-2789
**CODEN:**  VICOE5
**Language:**  English
**Document Type:**  Journal Paper (JP)
**Treatment:**  Practical (P); Theoretical or Mathematical (T)
**Abstract:**  A post-processing technique for removing discretisation artefacts (jaggies) is described. It is based on the detection of a jaggy by means of a suitable morphological filter and then using a heuristic algorithm to compute a probable density distribution, which is applied to the pixels adjacent to the jaggy. Also **dashed** lines are **recognized** and interpreted as possible discretisation artefacts. The method applies to both spatial and temporal aliasing  ( *8 refs.*)
**Subfile(s):**  C (Computing & Control Engineering)
**Descriptors:**  computer graphics; filtering and prediction theory
**Identifiers:**   spatial aliasing; morphological filters; discretisation artefacts; post-processing; jaggies; heuristic algorithm; density distribution; pixels ; dashed lines; temporal aliasing
**Classification Codes:**  C6130B (Graphics techniques); C1260 (Information theory)

INSPEC Update Issue: 1992-029
Copyright: 1992, IEE

05218376
**Title: A study on automatic input and recognition of engineering drawing**
**Author(s):** Dao-Ning Ying; Er-Jian Wang; Lan Ye; Wei Li; Yun Wang
**Author Affiliation:** Mold High-Tech Res. Inst., Zhejiang Univ., HangZhou, China
**Inclusive Page Numbers:** 478-81
**Publisher:** Int. Acad. Publishers, Beijing
**Country of Publication:** China
**Publication Date:** 1991
**Conference Title:** Second International Conference on Computer-Aided Design and Computer Graphics
**Conference Date:** 23-26 Sept. 1991
**Conference Location:** Hangzhou, China
**Conference Sponsor:** Chinese Comput. Federation Zhejiang Univ
**Editor(s):** Staudhammer, J.; Qunsheng Peng
**Number of Pages:** xvi+554
**Language:** English
**Document Type:** Conference Paper (PA)
**Treatment:** Practical (P)
**Abstract:** This paper presents algorithms for preprocessing and vectorizing scan digitized images of engineering drawings for transferring the resulting data to commercially available CAD/CAM systems. The algorithms include raster data compression using a doubly linked list RLE with Y bucket indexing, segmenting a mixed text/graphics image into text and graphics, line thinning to detect skeletons of graphics, and **recognition** of hand-printed **characters** and graphical structures such as line, arc, ellipse etc. The method for distinguishing thick, thin or **dash** line is also described  ( *8 refs.* )
**Subfile(s):** C (Computing & Control Engineering); E (Mechanical & Production Engineering)
**Descriptors:** CAD/CAM; computerised picture processing; data compression; engineering graphics
**Identifiers:** engineering drawing; scan digitized images; CAD/CAM systems; raster data compression; doubly linked list RLE; hand-printed characters; graphical structures
**Classification Codes:** C7480 (Production engineering computing); C6130B (Graphics techniques) ; C5260B (Computer vision and image processing techniques); E0410D ( Industrial applications of IT ); E1510 (Manufacturing systems)
**INSPEC Update Issue:** 1992-037
**Copyright:** 1992, IEE
**Abstract:** ...linked list RLE with Y bucket indexing, segmenting a mixed text/graphics image into text and graphics, line thinning to detect skeletons of graphics, and **recognition** of hand-printed **characters**

and graphical structures such as line, arc, ellipse etc. The method for distinguishing thick, thin or **dash** line is also described

03703372
**Title:  Applying pattern recognition techniques to the problem of word splitting in natural language**
**Author(s):**  Oregel-Opisso, J.L.
**Author Affiliation:**  Dept. of Comput. Sci., Inst. Tecnologico de Monterey, Mexico
**Inclusive Page Numbers:**  220-3
**Publisher:**  IEEE,  New York, NY
**Country of Publication:**  USA
**Publication Date:**  1985
**Conference Title:**  IEEE 1985 Proceedings of the International Conference on Cybernetics and Society (Cat. No.85CH2253-3)
**Conference Date:**  12-15 Nov. 1985
**Conference Location:**  Tucson, AZ, USA
**Conference Sponsor:**  IEEE
**U.S. Copyright Clearance Center Code:**  CH2253-3/85/0000-0220$01.00
**Number of Pages:**  1115
**Language:**  English
**Document Type:**  Conference Paper (PA)
**Treatment:**  Theoretical or Mathematical (T)
**Abstract:**  The author describes the way a **text** processor uses pattern **recognition** techniques to **hyphenate** words. It is a rule-based system in which syllabication rules are indexed by means of a discrimination net. The syllabication rules for Spanish are given, along with the corresponding discrimination net. Some examples illustrate the operation of the word-splitting algorithm. A comparison is made between this system and two other systems: one for dealing with English words, and one for Spanish words. The author concludes with a brief discussion of the system's weaknesses, and points out directions for future research   ( *5 refs.*)
**Subfile(s):**  C (Computing & Control Engineering)
**Descriptors:**  character recognition; natural languages; word processing
**Identifiers:**  text processing; pattern recognition techniques; word splitting; natural language; syllabication rules; discrimination net; Spanish
**Classification Codes:**  C1250B (Character recognition)
**INSPEC Update Issue:**  1986-015
**Copyright:**  1986, IEE
**Abstract:**  The author describes the way a **text** processor uses pattern **recognition** techniques to **hyphenate** words. It is a rule-based system in which syllabication rules are indexed by means of a

discrimination net. The syllabication rules for Spanish are...

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**Dialog eLink:** open url
8/5,K/15 (Item 8 from file: 2)
DIALOG(R)File 2: INSPEC

06296777
**Title:** How to win a dashed line detection contest
**Author(s):** Dori, D.; Liu Wenyin; Peleg, M.
**Author Affiliation:** Fac. of Ind. Eng. & Manage., Technion-Israel Inst. of Technol., Haifa, Israel
**Book Title:** Graphics Recognition, Methods and Applications. First International Workshop. Selected Papers
**Inclusive Page Numbers:** 286-300
**Publisher:** Springer Verlag, Berlin
**Country of Publication:** Germany
**Publication Date:** 1996
**Conference Title:** Proceedings of Workshop on Graphics Recognition
**Conference Date:** 10-11 Aug. 1995
**Conference Location:** University Park, PA, USA
**Editor(s):** Kasturi, R.; Tombre, K.
**ISBN:** 3 540 61226 2
**Number of Pages:** x+308
**Language:** English
**Document Type:** Conference Paper (PA)
**Treatment:** Practical (P)
**Abstract:** Correct **recognition** of **dashed** lines is essential for high-level technical drawing understanding. Automatic solution is quite difficult due to the limitations of machine vision algorithms. In order to promote development of better techniques, a **dashed** line detection contest was held at the Pennsylvania State University during the First International Workshop on Graphics Recognition, August 9-11, 1995. The contest required automatic detection of **dashed** lines on test drawings at three difficulty levels: simple, medium and complex, which contained **dashed** and **dash**-dotted lines in straight and curved shapes, and even interwoven texts. This paper presents **dashed** line detection techniques which won the first place in the contest. It successfully detected the **dashed** lines in all drawings. The underlying mechanism is a sequential stepwise recovery of components that meet certain continuity conditions. Results of experiments are presented and discussed  ( *12 refs.*)
**Subfile(s):** C (Computing & Control Engineering)
**Descriptors:** computer vision; document image processing; engineering graphics; image recognition
**Identifiers:** dashed line detection; technical drawing understanding; machine vision algorithm; sequential stepwise recovery; contest; dash-dotted lines
**Classification Codes:** C5260B (Computer vision and image processing techniques); C6130D ( Document processing techniques); C6130B (Graphics techniques); C1250 ( Pattern recognition)
**INSPEC Update Issue:** 1996-024

.....................................................................................................................................................................................

**Dialog eLink:** 
8/5,K/16 (Item 9 from file: 2)
DIALOG(R)File 2: INSPEC

06296769
**Title:** **Automatic region labeling of the layered map**
**Author(s):** Min-Ki Kim; Mun-Kyu Park; Oh-Sung Kwon; Young-Bin Kwon
**Author Affiliation:** Chung-Ang Univ., Seoul, South Korea
**Book Title:** Graphics Recognition, Methods and Applications. First International Workshop. Selected Papers
**Inclusive Page Numbers:** 179-89
**Publisher:** Springer Verlag, Berlin
**Country of Publication:** Germany
**Publication Date:** 1996
**Conference Title:** Proceedings of Workshop on Graphics Recognition
**Conference Date:** 10-11 Aug. 1995
**Conference Location:** University Park, PA, USA
**Editor(s):** Kasturi, R.; Tombre, K.
**ISBN:** 3 540 61226 2
**Number of Pages:** x+308
**Language:** English
**Document Type:** Conference Paper (PA)
**Treatment:** Application (A); Practical (P)
**Abstract:** In this paper, we describe an automatic region labeling method, which identifies each region and recognizes region names. Before tracing the region boundaries, it extracts the region names which consist of characters, dots, **dashes**, and indication lines. It uses two **recognition** methods to **recognize** **characters** in the region name. In the case of **recognizing** the isolated **characters**, it uses the open and close features. The **characters** touching boundaries are **recognized** by template matching. After removing the components of region names from a map image, the boundaries of each region are extracted. After which it then vectorizes the region boundaries. From these recognition results, the original map can be constructed. It reduces the storage to one fifth of the original data. The proposed method shows 95% accuracy of region labeling  ( *8 refs.*)
**Subfile(s):** B (Electrical & Electronic Engineering); C (Computing & Control Engineering)
**Descriptors:** geographic information systems; pattern recognition
**Identifiers:** automatic region labeling method; region boundaries; dashes; indication lines; isolated characters; template matching
**Classification Codes:** B6140C (Optical information, image and video signal processing); C7840 (Geography and cartography computing); C1250 (Pattern recognition)
**INSPEC Update Issue:** 1996-024

**Copyright:** 1996, IEE

**Abstract:** ...labeling method, which identifies each region and recognizes region names. Before tracing the region boundaries, it extracts the region names which consist of characters, dots, **dashes**, and indication lines. It uses two **recognition** methods to **recognize characters** in the region name. In the case of **recognizing** the isolated **characters**, it uses the open and close features. The **characters** touching boundaries are **recognized** by template matching. After removing the components of region names from a map image, the boundaries of each region are extracted. After which it then

## V. Additional Resources Searched

No additional results of relevance found in the additional databases identified in the coverpage correspondence.